DOCUMENT RESUME

ED 264 313 UD 024 439

AUTHOR Levin, Henry M.
TITLE The Educationally Disadvantaged: A National Crisis. The State Youth Initiatives Project. Working Paper #6.
INSTITUTION Public/Private Ventures, Philadelphia, PA.
SPONS AGENCY Mott (C.S.) Foundation, Flint, Mich.
PUB DATE Jul 85
NOTE 34p.; For related documents, see ED 227 325 and ED 251 555.
AVAILABLE FROM The Resource Center, Public/Private Ventures, 399 Market Street, Philadelphia, PA 19106.
PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Cost Effectiveness; *Educational Improvement; *Educationally Disadvantaged; *Educational Policy; Elementary Secondary Education; Labor Force; *Outcomes of Education; Racial Factors; Socioeconomic Influences; State Action; *Student Needs
IDENTIFIERS *Reform Efforts

ABSTRACT

Available data reviewed in this paper suggest that at least 30% of elementary and secondary school students in the United States are educationally disadvantaged, and that the proportion will rise rapidly in the future. When these youth reach adulthood, their poor educational foundations will have deleterious economic and social consequences, including high rates of unemployment, low incomes, dependence on public assistance and higher rates of criminal involvement. The paper begins by describing the population of educationally disadvantaged students in terms of its composition, growth, and educational performance. Second, the consequences of ignoring the needs of these students are considered. Third, the failure of current national educational reforms to consider the needs of the educationally disadvantaged population is discussed. And, fourth, an agenda for addressing these needs is outlined. This agenda describes goal setting; accountability; resource allocation; and the responsibilities of government, parents and students, communities, schools and agencies, colleges and universities, and business and industry. (CG)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED264313

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Natalie Jaffe
Public/Private Ventures

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

P/PV

Public/Private Ventures

399 Market Street
Philadelphia, PA 19106
(215) 592-9099

The State Youth Initiatives Project

Working Paper #6

The Educationally Disadvantaged: A National Crisis

by Henry M. Levin

July 1985

UD024439

BEST COPY AVAILABLE

Public/Private Ventures
Board of Directors

Rex D. Adams
Vice President
Employee Relations
Mobil Oil Corporation
New York, New York

Judy Barker
President
The Borden Foundation
Columbus, Ohio

Alan Campbell
Vice Chairman
ARA Services, Inc.
Philadelphia, Pennsylvania

Edwin D. Campbell
Executive Vice President
National Alliance of Business
Washington, D.C.

Walter D'Alessio
President & Chief Executive Officer
Latimer and Buck
Philadelphia, Pennsylvania

Sol Hurwitz
Senior Vice President
Committee for Economic Development
New York, New York

Katharine C. Lyall
Vice President, Academic Affairs
University of Wisconsin System
Madison, Wisconsin

Arabella Martinez
Arabella Martinez Institute
Washington, D.C.

James L. Medoff
Professor, Department of Economics
Harvard University
Cambridge, Massachusetts

Steven A. Minter
Director
The Cleveland Foundation
Cleveland, Ohio

Ersa H. Poston
Personnel Management Consultant
McLean, Virginia

William J. Spring
Vice President
Federal Reserve Bank of Boston
Boston, Massachusetts

Anita A. Summers
Chairperson, Department of Public Policy and Management
The Wharton School
University of Pennsylvania
Philadelphia, Pennsylvania

Mitchell Sviridoff
President
Local Initiatives Support Corporation
New York, New York

Alfred M. Zuck
Executive Director
National Association of Schools of Public Affairs and Administration
Washington, D.C.

Alan Campbell
Chairman of the Board

Michael A. Bailin
President

Public/Private Ventures (P/PV) is a national, not-for-profit corporation that seeks effective approaches to job training and education for disadvantaged citizens. P/PV designs and manages demonstration projects, conducts program evaluations, and provides technical assistance to others. Its work is supported by funds from both the public and private sectors.

A list of publications and further information about P/PV are available from: The Resource Center, Public/Private Ventures, 399 Market Street, Philadelphia, Pa., 19106. Telephone: 215-592-9099.

BEST COPY AVAILABLE

The research for this working paper was made possible by a grant from the Charles Stewart Mott Foundation. The interpretations and conclusions are the author's and not necessarily those of the Mott Foundation. This paper benefited from the invaluable suggestions of Gail Meister and May Long Pritchard.

CONTENTS

Page

PREFACE.....i

INTRODUCTION.....1

I. EDUCATIONALLY DISADVANTAGED STUDENTS.....3
Educational Performance
Rapid Growth of the Disadvantaged Population
Rapid Growth of the Educationally Disadvantaged
Increasing Degree of Disadvantaged
Summary

II. AN IMPENDING CRISIS.....9
Deterioration of the Labor Force
Rising Public Costs and Falling Tax Revenues
Higher Education
A Dual Society

III. RECENT EDUCATIONAL REFORMS AND THE DISADVANTAGED.....13
Current Responses
Reforms As Obstacles to the Disadvantaged
Summary

IV. ADDRESSING THE NEEDS OF THE EDUCATIONALLY DISADVANTAGED..18
Goals
Accountability
Resources
Responsibilities
Investing in the Education of the Disadvantaged

BIBLIOGRAPHY.....24

PREFACE

This paper was commissioned by Public/Private Ventures for publication by its Information Center on State Youth Initiatives, a project supported by the Charles Stewart Mott Foundation. The author, Dr. Henry M. Levin, is an eminent educational economist, professor of economics at the School of Education at Stanford University and former director of the Institute for Research on Educational Finance and Governance.

The issues he raises are of critical importance. Dr. Levin documents our failure to address the needs of disadvantaged students in the public schools, a failure that has created a problem of literally crisis proportions. One third of the nation's pupils, he contends, will be doomed to ineffectuality in the labor market unless a sense of urgency is brought to bear on the search for remedy. Without that urgency, the problem will continue to grow and the nation's economic and social health will be severely undermined. Dr. Levin's analysis is compelling, timely and urgent.

In other forums, Dr. Levin has made the case for a comprehensive strategy to address the problems of educational disadvantage. In this paper, his broad recommendations represent an important framework for thought and further discussion by the various constituencies he defines in Chapter IV.

In relation to Dr. Levin's designation of change agents, I would like to comment further on the role of the federal government and the states and to add one more category to the list.

First, I would emphasize strongly the role of the federal government in providing greater focus and resources to remedy educational deficiencies among the increasing disadvantaged population. The federal government is consciously reducing its involvement and direct support of programs geared to meet the needs of the nation's poor. In education, the federal role was crucial to desegregation and compensatory education (Head Start and Chapter I, among others.) In extending education reform to the disadvantaged, a federal role would be crucial as well..

Second, I would recognise the serious difficulties faced by states in reprogramming their current resources to meet these newly perceived needs. States bear the constitutional responsibility to educate the nation's youth. They have the potential to coordinate their programs and funds in such a way as to serve disadvantaged youth far more effectively. Based on our work with the states of Wisconsin, Connecticut, Massachusetts, South Carolina and Oregon, however, we recognize the considerable obstacles to achieving that coordination; difficulties so substantial that only a sense of the greater enormity of the problem, driven by an understanding of the consequences of inaction, will make such coordinated reprogramming feasible.

And third, I would like to add to Dr. Levin's list of responsible parties: research and development organizations that are concerned about the education, training and employment of disadvantaged youth. Many of these organizations, including P/PV, are active in efforts to define specific and appropriate strategies that address the problems of educational disadvantage.

No one intervention provides the entire answer, but there are many approaches from which we can learn:

- o institutional strategies such as partnerships between schools and businesses, alternative schools, linking summer programs to year-round education efforts, improved school-to-work transition activities;

- o programmatic strategies such as compensatory education, remediation, parents in the schools, peer teaching and cooperative learning, vocational training at the secondary level;

- o instructional strategies such as individualized, self-paced, competency-based education; mastery learning; computer-assisted instruction; modernized texts.

What is needed now is for the public at large to recognize the severity and magnitude of the problem of educational disadvantage -- to the point where it will support federal, state and local efforts to increase resources to deal with it -- and for professionals in the fields of employment and training and education to focus effort on developing approaches that work for this population, to demonstrate how to do more with less, and to help create a climate in which additional resources will be allocated to address the issue of educational disadvantage.

Michael A. Bailin
President
Public/Private Ventures

INTRODUCTION

A casual glance at the media would suggest that the U.S. is now experiencing a great renaissance in elementary and secondary education. During the last two years, over a dozen national reports have been produced by special commissions and scholars outlining the case for educational reform as well as the specific strategies that should be followed (Griesemer and Butler, 1983). The states have responded with proposals and legislation which follow closely the recommendations in the national reports (U.S. Department of Education, 1984). But although these calls for reform have argued for an overall upgrading of educational standards and have suggested particular strategies to achieve them, they tend to be much narrower than their purported goals would imply.

A major shortcoming is that the proposed reforms have relatively little to offer educationally disadvantaged students. Pupils who are defined as educationally disadvantaged lack the home and community resources to benefit from conventional schooling practices. Because of poverty, cultural obstacles or linguistic differences, they tend to have low academic achievement and high dropout rates. Such students are heavily concentrated among minority groups, immigrants, non-English speaking families and economically disadvantaged populations.

Available data reviewed in this paper suggest that at least 30 percent of elementary and secondary school students in the United States today are educationally disadvantaged, and that the proportion will rise rapidly in the future. When these youth reach adulthood, their poor educational foundation has deleterious economic and social consequences, including high rates of unemployment, low incomes, dependence on public assistance and a higher rate of criminal involvement.

The theses of this paper are:

- that the spate of recent educational reforms is not likely to be successful in addressing the problems of the educationally disadvantaged because these reforms do not address the pertinent issues;
- that there are effective ways of providing appropriate educational services that must be implemented so that the rapidly increasing population of educationally disadvantaged youth does not automatically grow up as a rising population of disadvantaged adults;

- that the benefits of such policies far exceed the costs; and

- that failure to address the problems of educational disadvantage will have serious consequences for the nation as a whole.

The paper is organized in the following way: First, the population of educationally disadvantaged students will be described in terms of its composition, growth and educational performance. Second, the consequences of ignoring their educational needs will be reviewed. Third, the failure of current national educational reforms to consider their special needs will be discussed in some detail. And fourth, an agenda for addressing these needs -- at less cost than neglecting them -- will be outlined.

I. EDUCATIONALLY DISADVANTAGED STUDENTS

All student populations include substantial individual variations in educational performance. However, by virtue of the accident of birth, some groups of students are likely to experience only the most limited educational progress in the present school system. Persons from non-white, Hispanic and immigrant families, and from households where parents have low income and little education, tend to complete fewer years of schooling, are more likely to drop out of high school and show lower test scores in virtually all academic subjects than their more advantaged peers. These are the educationally disadvantaged.

U.S. schools are least successful in teaching this population. They are most successful in assisting youngsters from families in which: the parents have graduated from high school and undertaken some college; the income level covers basic needs and allows some discretion in expenditures; the housing provides adequate shelter and individual privacy for reflection or study; and the language spoken in the home is a standard version of English, the language commonly used in written communications, employment and the performance of civic responsibilities. All of these factors contribute to the educational process by supporting the skills, values and language that schools emphasize and by providing the additional resources in the home that reinforce schooling practices. In addition, it is important for children to be surrounded by persons who have succeeded both educationally and economically, so that the connection between education and future economic success is made concrete. When students lack these advantages, conventional schooling tends to be much less successful in meeting their needs.

Educational Performance

Although the last two decades have seen some movement to provide compensatory education -- particularly under Title I of the Elementary and Secondary Education Act of 1965 and its successor, Chapter I of the Education Consolidation and Improvement Act of 1981 -- such programs have been modest in their ambitions and financial base. Typically, they have focused on only a portion of the disadvantaged, and the resources that they have provided have been far short of what is required to make any substantial difference. The evidence suggests that such policies have effected small reductions in the test score gap between white and non-white students over time (Burton & Jones, 1982; National Center for Education Statistics, 1984:54-56). Even so, the educational performance of disadvantaged students lags considerably behind that of their more advantaged counterparts, and they are more likely to drop out before completing secondary school.

For example, dropout rates of Hispanics, blacks and other non-white groups as well as whites from low-income backgrounds are considerably higher than the average for other groups (Rumberger, 1983). Dropout rates for blacks and for students in large cities with high concentrations of minorities are reported to exceed 50 percent (National Commission on Secondary Education for Hispanics, 1984:23). About 14 percent of sophomores in 1980 had dropped out of secondary school by the spring of their senior year in 1982 (National Center for Education Statistics, 1984:154). But the rates for blacks and Hispanics were fully 50 percent higher than that of white non-Hispanic students. Even these data understate the true disparity, since they do not account for dropouts prior to the spring of the sophomore year. Data suggest that about 40 percent of Hispanic dropouts leave before reaching tenth grade (National Commission on Secondary Education for Hispanics, 1984:10).

In what is generally regarded as the most sophisticated statistical analysis on the subject, Rumberger (1983) examined the influence of race, sex and family background on dropping out. Using an extensive 1979 data survey of youth 14 to 21 years old who had dropped out of school, he attempted to ascertain the determinants of dropout behavior. The most important factors that predicted dropouts were the race and socioeconomic background of the student. Overall dropout rates among females were 20 percent for blacks, 31 percent for Hispanics, and 16 percent for non-Hispanic whites; among males they were 26 percent for blacks, 29 percent for Hispanics, and 19 percent for non-Hispanic whites. Thus, racial differences were large, even when socioeconomic disadvantage was not accounted for.

However, the probability of dropping out rose considerably for all racial groups if the student came from a socioeconomically disadvantaged background. For disadvantaged females the dropout rates were 29 percent for blacks, 43 percent for Hispanics, and 37 percent for whites; for males they were 23 percent for blacks, 44 percent for Hispanics, and 39 percent for whites. Although a far higher proportion of blacks is disadvantaged than whites, among disadvantaged whites the dropout rates were higher than for disadvantaged blacks.

Achievement scores of the disadvantaged are considerably lower than their more advantaged colleagues' even at school entry, and they fall farther behind as schooling progresses. As the Coleman Report found, racial differences are substantial, and socioeconomic variables are the most powerful predictors of test scores within race (Coleman et al., 1966). These findings have been replicated in many subsequent studies (Bridge, Judd, and Moock, 1978). For example, when the mathematics test scores of a national sample of students who were nine, 13 and 17 years old were compared by race, white students had better performances at all age levels than blacks and Hispanics, and the test gap was greater at age 17 than at nine (National Center for Education

Statistics, 1984:52). According to the College Board, among high school students who took the Scholastic Aptitude Tests for college admission in 1983-84, the average combined score for the verbal and quantitative exams among blacks was about 217 points below that of non-minority whites. Although the gap had closed from a 258 point difference in 1976, the 1983-84 difference still meant that with the white average at the 50th percentile, the average black score was at only the 17th percentile (New York Times, 1985).

Rapid Growth of the Educationally Disadvantged

Educationally disadvantaged students have been present in the schools since the origins of public schooling in the U.S. in the middle of the 19th century. But it was not until the 1960s that the schools began explicitly to recognize that such students had to be provided with tailored educational programs if they were to succeed. Up to that point, the blame for educational failure of students fell on the students and their families, with schools taking little or no responsibility. It was assumed that schools were available to all, and that those who did not succeed educationally were limited in either their abilities or efforts or both. It was not until the second half of the 20th century that policymakers began to realize that even highly conscientious students with good abilities might have special educational needs if they came from educationally disadvantaged families. By the middle 1960s, state and federal governments had established compensatory educational programs for the disadvantaged, and local educational agencies attempted to adapt their instructional strategies to meet the needs of such students. As we emphasized above, recent evidence suggests that these programs have succeeded in reducing modestly the test score gap between minority and white students over time, but the gap remains substantial.

One of the shortcomings of past compensatory educational programs was that resources were often inadequate to make much of a difference. For example, the largest federal program, Title I, typically represented appropriations equal to only about three percent of total elementary and secondary school expenditures in the U.S. Even for children receiving the services, compensatory educational resources were relatively nominal. Two recent trends suggest that this situation will deteriorate further, even if current funding initiatives are maintained.

First, the disadvantaged student population is growing at a far more rapid rate than that of the rest of the population, as extrapolated from figures on minority enrollments and poverty. Although not all minorities are disadvantaged, and many disadvantaged students are not members of ethnic or racial minority groups, the minority population can be used as a proxy for assessing the size of the disadvantaged group in the public schools. From 1970-80, U.S. public school enrollments from the preprimary level to twelfth grade declined from about 46 million to 41 million students (National Center for Education Statistics,

1984:16). At the same time, minority enrollments rose from about 9.5 million to about 11 million, or from about 21 percent to 27 percent of the total. Minority enrollments have been increasing at a more rapid pace than the general population because of a considerably higher birth rate and immigration -- both legal and illegal -- that is unprecedented in recent decades. Both factors create rapid growth, particularly among school-age populations, since immigrant families tend to be young and have children.

State figures vary widely. At one extreme is California where minority enrollments rose from about 27 percent of the total in 1970 to about 43 percent in 1980; it is expected that minorities will become the dominant component of California's student body before 1990. While the growth has not been as rapid in Texas, the proportion of minority students was about 46 percent in 1980, rising from about 37 percent in 1970. During the same period, the minority student population rose in Connecticut from 12 to 17 percent; in Florida from 28 to 32 percent; in Massachusetts from six to 11 percent; in New York from 25 to 32 percent; in Oregon from about five to nine percent and in South Carolina from 41 to 44 percent (National Center for Education Statistics, 1984:18). Florida, New York and South Carolina have large minority student populations with relatively low growth. Connecticut, Massachusetts and Oregon have relatively low proportions of minority students, but the growth rates have been very high.

As for the major cities, national and state data tend to understate the challenge. By 1982, 71 percent of Miami's (Dade County) elementary and secondary students were minorities; for Philadelphia, it was 73 percent; New York City, 74 percent; Los Angeles, 78 percent; Baltimore, 80 percent; Chicago, 84 percent; and Detroit, 89 percent (McNett, 1983).

An additional reason for the growth of disadvantaged groups in the schools is the increase among all racial groups in the number of children in poverty families. The proportion of children in poverty stayed at about 16 percent between 1969 and 1979, but it rose precipitously to 22 percent from 1979 to 1983 (Koretz and Ventresca, 1984). This represented an increase of about 3.7 million in only four years to a total of almost 14 million children (Ibid.). Some 45 percent of black school-age children and some 36 percent of Hispanic school-age children lived in poverty in 1983 (Ibid.) Although some of the increase was associated with a rising incidence of single-parent, female-headed households, most was due to a higher poverty rate created by a changing economy, in spite of the overall economic recovery in 1983 (Ibid.:4).

Increasing Degree of Disadvantage

Educational disadvantage is not only increasing in volume but in degree, because of the extreme impoverishment of recent immigrants. Many new immigrants are arriving from the poorest

countries in Asia and Latin America. While U.S.-born parents of disadvantaged children typically have at least some high school education because of the compulsory attendance laws here, immigrants from rural areas of their societies typically have not completed primary school. Further, they come from the most impoverished regions of their countries, areas in which the quality of schooling is notoriously low. This means that they often lack the educational backgrounds to help their children succeed in school.

Beyond this, a high proportion of the immigrants do not speak English, so English is not reinforced in the home. Since the English language is the currency of instruction in the U.S., this places their children at a further disadvantage. According to the U.S. Census, about 17 percent of children 5-17 years old were considered to be members of minority language populations in 1980; that is, living in households in which a language other than English was spoken (Waggoner, 1984). In New Mexico, California and Arizona, over one-third of students had such backgrounds. But even Connecticut and Massachusetts had 21 percent and 19 percent of their students respectively in this category. Students characterized by having parents with little education, low income and a language other than English in the home are multiply disadvantaged from an educational perspective. And the make-up of current immigration -- both legal and illegal -- will tend to reinforce this pattern.

Evidence of this increasing degree of disadvantage may also be indicated by the fact that in the fall of 1972 about 46 percent of Hispanic high school graduates participated in post-secondary education immediately following graduation, but by the fall of 1980 that proportion had fallen to 40 percent, despite the widespread loosening of admissions standards during that period (National Center for Education Statistics, 1984:160). While the participation rate of Hispanics from middle socioeconomic backgrounds fell by about 10 percent, the rate for Hispanics of lower socioeconomic backgrounds fell by 22 percent (Ibid.). This pattern is especially surprising, since the high school dropout rate for Hispanics rose over that period (McNett, 1983:16), so that Hispanic high school graduates were becoming more educationally "select" over time and would normally have been expected to increase their rates of college attendance. This drastic change in participation over such a short period may have been occasioned by poorer academic preparation and thus ineligibility for higher education, or by less adequate financial resources, both factors associated with increasing disadvantage.

Summary

The evidence suggests that the proportion of disadvantaged students in American education is high and is increasing rapidly. While there is no precise method of estimating the total number of educationally disadvantaged youth in the U.S., an estimate must include students in poverty and those whose chances of educational success are handicapped by virtue of language and

cultural obstacles. If we assume that about three-quarters of minority students meet the economic and/or cultural-linguistic criteria, that accounts for almost 8 million disadvantaged students in 1982. About 40 percent of minority students met the poverty criterion alone in 1983, according to Koretz and Ventresca (184:2). If we augment that total by the estimated 14 percent of non-minority students who live in poverty, another 4 million students are included for a total of about 12 million disadvantaged students out of about 40 million in 1982. This suggests that disadvantaged students accounted for about 30 percent of elementary and secondary students in 1982, and the proportion is increasing. (For purposes of comparison, it should be noted that in 1982, the U.S. Department of Education estimated that 42 percent of <u>all</u> children between the ages of five and 14 had limited proficiency in English. This estimate was based on the performance of a large national sample of children who were tested on their English proficiency). Even this total does not include the high number of disadvantaged dropouts who have left school but are less than 18 years old. Further, the evidence suggests that the degree of educational disadvantage is probably rising as the disadvantaged population is augmented by poor immigrants.

Both of these factors suggest that the challenge to American education posed by disadvantaged students will rise precipitously at a time when even the present needs of educationally disadvantaged students have not been addressed satisfactorily. Accordingly, it is important to consider the consequences of ignoring these trends.

II. AN IMPENDING CRISIS

When the disadvantaged population represented a relatively small portion of school enrollments, the failure of the schools to educate this group was tragic for its members and contrary to the principles of an open and democratic society. But its immediate effects were mainly confined to the disadvantaged population. For this reason, the issues could be ignored by the more advantaged majority without consequence, in the absence of moral or altruistic concerns. As the disadvantaged have increased in numbers and are projected to become a majority of the public school population -- and ultimately the overall population -- the problem is no longer confined to that group. The potential consequences of inaction accrue to the larger society as well.

These consequences include (1) reduced economic competitiveness of the nation as well as states and industries that are most heavily impacted by these populations, (2) higher costs of public services associated with impoverishment and crime, (3) massive disruption in higher education, and (4) ultimately, the emergence of a dual society with a large and poorly educated underclass.

Deterioration of the Labor Force

One consequence of ignoring the educationally disadvantaged will be a serious deterioration in the quality of the labor force. As long as the disadvantaged were a small minority, they could be absorbed by low skill jobs or remain unemployed without intolerable consequences for the economy. But, as they become an increasing share of the labor force, their inadequate educational preparation will be visited on the competitive position of the industries and states in which they work and on our national economic status.

High dropout rates, low test scores, and poor academic performance of a group that will become a larger and larger portion of the school population mean that a larger and larger portion of the future labor force will be undereducated for available jobs. Here we refer not only to managerial, professional and technical jobs, but to even lower level service and assembly work. Clerical workers, cashiers and salesworkers all need basic skills in oral and written communictions (National Academy of Sciences, 1984), acquisition of which is hardly guaranteed in the schooling of the disadvantaged. A U.S. government study in 1976 found that while 13 percent of all 17 year olds were classified as functionally illiterate, the percentages of illiterates among Hispanics and blacks were 56 and 44 percent respectively (National Assessment of Educational Progress, 1976).

In this respect, a growing and undereducated student population will ultimately become a growing and underprepared workforce. Employers will suffer in terms of lagging productivity, higher training costs, and competitive disadvantage that will

result in lost sales and profits. AT&T spends $6 million a year to provide basic reading and math competencies to 14,000 employees. ("Basic Skills in the U.S. Work Force," Center for Public Resources, N.Y., 1982).

This problem will be especially severe for those states with the largest growth in educationally disadvantaged youth such as California, where minority students will become the majority by 1990. Those industries dependent upon these populations for their labor needs will also suffer. As a result, the states and federal government will face a declining tax base and a concomitant loss of revenues that could be used to fund improvements in education and other services.

Rising Public Costs and Falling Tax Revenues

A second consequence of failing to address the challenge of the eductionally disadvantaged will be rising costs for public services as more and more citizens rely upon public assistance and as undereducated teens and adults pursue illegal activities to fill idle time and obtain the income that is unobtainable by legal means. When one applies the present unemployment rates of 40-50 percent to a larger and larger group of teenage dropouts, there are likely to be increasing numbers of undereducated youngsters taking their activities to the streets rather than to the workplace. This development will not only make the U.S. a less desirable place to live, but will also increase the costs of police services and the system of criminal justice. Many of the disadvantaged will continue to have difficulty finding regular jobs as adults, so their families will need to depend upon the availability of public assistance to survive.

At the same time, the potential decline in economic activity created by an underprepared workforce will erode tax revenues. This situation will place additional pressure on middle class taxpayers to pay higher taxes for welfare and the system of criminal justice at the same time that the economy is flagging. As a result, taxpayers will likely resist raising taxes under troublesome economic conditions, while pressures for higher expenditures on both the welfare and the criminal justice system mount.

Higher Education

The implications for higher education are also severe. Even with high dropout rates, an increasing proportion of high school graduates will come from disadvantaged backgrounds. Without early educational intervention, they will leave high school with serious learning deficits which will prevent many of them from benefiting from current levels of instruction in colleges and universities. To the degree that high school graduation entitles them to pursue post-secondary study, as in community colleges and many state universities, there are two possibilities.

The first is that increasing numbers of the disadvantaged will gain college entry, but a large proportion of them will experience academic failure and leave without degrees. Among the group that entered college in 1972, only 13 percent of Hispanics, but 34 percent of Anglos, had completed bachelor's degrees by 1976 (National Commission on Secondary Education for Hispanics, Volume I, 1984:24). The second is that colleges and universities will have to undertake massive remedial functions to assist the disadvantaged to reach levels where they can benefit from conventional instruction. According to a recent survey by the U.S. Department of Education, one in every four freshmen is enrolled in a remedial math course and one in every six in remedial reading ("Indicators of Educational Status and Trends," U.S. DOE, 1985).

Both of these outcomes are costly to students and institutions. The California State University, for example, spent more than $19 million during the 1980-81 school year in remedial education for 38,000 students (Chronicle of Higher Education, February 6, 1985. p.3). Large numbers of failures mean wasted time for students and wasted resources for colleges, not to mention the psychological costs to students of not being able to "make it."

Conflicting pressures both inside and outside higher education will increase; on the one hand to reduce standards and provide more remediation, and on the other to maintain the character of existing institutions by resisting accommodation to the rising population of educationally disadvantaged students. This would probably take the form of requiring college entrance examinations for admission to public institutions of higher education as well as raising academic coursework requirements for admission as many of the states are presently doing (U.S. Department of Education, 1984). Such changes would certainly reduce the numbers of educationally disadvantaged applicants qualifying for admission, given their lower test scores. Such a change would create an elite system of higher education, a result that flies in the face of the democratic mission conferred upon public systems of higher education supported by tax revenues collected from the entire population. (Even the poor and the unemployed must pay property and sales taxes.)

Either the reduction of standards in higher education or the movement to greater selectivity would be costly and politically contentious. Both would compromise the quality of college education even for the non-disadvantaged members of the future labor force who are college-educated.

A Dual Society

As the disadvantaged population increases without appropriate educational intervention, it is likely to form the underclass of a dual society. Composed of racial and ethnic minorities and persons from economically disadvantaged origins, members will

face high unemployment rates, low earnings and menial occupations, while the potential political power of the group increases with its rise in numbers. The upper tier of society will be composed mainly of prosperous non-Hispanic whites who will be more higher educated and will enjoy higher employment rates and good occupations.

The future of the lower tier is suggested by the present status of those groups with heavy concentrations of the educationally disadvantaged. Non-white unemployment rates in recent years have been more than double those of whites (Monthly Labor Review, 1984:70). The unemployment rate for blacks 16-19 years of age has been in the 40-50 percent range in the last few years (Ibid.). The median income of non-whites is considerably below that of whites (U.S. Department of Commerce, 1983b: Tables 4, 13, and 19). And the expected lifetime earnings of high school dropouts are about one-third less than those of high school graduates and half those of college graduates (U.S. Department of Commerce, 1983a).

The spectre of a dual society suggests political conflict and social upheaval. In several states, the educationally disadvantaged will constitute a majority of the population and a potential majority of voters as youth reach adulthood. In the democratic tradition, they will support social movements that improve their situation (Carnoy and Levin, 1985). At the same time, society's earlier educational neglect may create a largely uninformed electorate, incapable of fully understanding the important technical, social, and economic issues that are at stake. Economic and educational inequality in conjunction with equal political rights suggest future polarization and intense conflict.

Unless the nation responds to the imminent crisis of the educationally disadvantaged, a number of deleterious consequences seem inevitable. These include a two-tiered society composed ultimately of a majority of poorly educated and economically deprived non-whites, immigrants, and impoverished whites, and a minority sector that is more highly educated and prosperous that is composed primarily of non-Hispanic whites. This situation will lead to serious political conflict and potential social disruption. It will create a costly challenge for higher education and long-term deterioration in the quality of the labor force and competitive position of the nation and of those states and industries most impacted by a disadvantaged workforce. Finally, it will escalate the costs of public assistance and criminal justice, while the ability to finance such services will be undermined by a deterioration in the economic situation.

Although these consequences seem to be reasonable projections of the present situation, they can be averted through judicious public policy. Obviously, major attention needs to be focused on improving the education of the disadvantaged to avoid these developments. To what degree do the recent educational reforms promise to address effectively the needs of the educationally disadvantaged?

III. RECENT EDUCATIONAL REFORMS AND THE DISADVANTAGED

The year 1983 heralded a crusade for massive educational reform in America. Although some two dozen reports were issued by different commissions and study groups, only a portion of these were considered both comprehensive and national in scope. These calls for educational reform were not a response to the plight of disadvantaged students. Rather, they seem to be premised on the concern that, in the absence of major changes in American education, the U.S. economy might lose in the competitive race for international markets in an age of high technology (Levin and Rumberger, 1983). This focus is especially explicit in A Nation at Risk (National Commission on Educational Excellence, 1983), the report of the Task Force on Education for Economic Growth (1983), and that of the National Science Board (1983), but it is also central to many of the other national reports. Other reports focus on high school reforms (Boyer, 1983; Sizer, 1984), and at least one makes a plea for a common education along the lines of promoting our western heritage (Adler, 1982). However, it is clearly the calls for upgrading the quality of education to meet the international challenge that seem to have primacy in the national debates and towards which states have been responding (U.S. Department of Education, 1984).

The most prominent of the recommendations seek specific changes that would strengthen curricula and standards at the secondary level. These include:

- o implementing competency standards for graduation;
- o requiring more courses in the sciences, mathematics, English and foreign languages;
- o increasing the length of the school day and school year;
- o upgrading textbooks and instructional materials to make them more demanding;
- o increasing salaries and the use of merit pay and career ladders for teachers; and
- o improving teacher licensing, hiring and retention standards.

For a number of reasons these requirements are only marginally relevant to disadvantaged populations. Some of them may actually be harmful, since they create additional barriers to high school completion without providing the resources and assistance necessary for the educationally disadvantaged to meet the new standards.

Current Responses

The states have responded to the reform agenda by legislating some of the recommendations, discussing others, directing the attention of local education authorities to still others and ignoring the remainder. Even where reform has been converted into legislation, critics have found that it often takes a rigid, mechanical approach which is unlikely to have the desired results (Cross, 1984) or that it provides only a large number of questionable and idiosyncratic responses rather than a comprehensive solution to the issues (Cuban, 1984).

One of the first states to pass reform legislation in response to this agenda was California. Among the features of its Senate Bill 813, California mandated new high school graduation requirements, effective June 1987. These include three years of English and social studies, two years each of mathematics and science, one year of foreign language or fine arts, and two years of physical education. The State Department of Education recommended to local districts even higher minimum requirements consisting of four years of English, three of mathematics and social studies, two of science and foreign language, one of visual and performing arts, and half a year of computer studies. California also legislated an increase in the minimum school year, and incentives were provided for increasing daily and annual instructional time. In addition, provisions were made for upgrading text books, promoting specialized high schools, expanding statewide testing, improving school discipline, raising teacher salaries, formulating more rigorous procedures for teacher certification, establishing a system of mentor teachers, streamlining dismissal of unsatisfactory teachers, and establishing provisions for enhancing professional development for teachers and administrators (U.S. Department of Education, 1984:30-33).

The states of Connecticut and Massachusetts have been considering similar changes, while Oregon has been focusing on curriculum reform, graduation requirements, college admission standards and teacher certification (Ibid.:36-38, 72-74, 108-110). The absence of concern for the plight of the educationally disadvantaged in discussions of educational reform in Massachusetts prompted the preparation of an outstanding report on the needs of the disadvantaged in that state (Massachusetts Advocacy Center, 1984).

South Carolina has been a major exception to the overall trend by passing legislation in the spring of 1984 that makes explicit provisions for the disadvantaged. In its overall comprehensive reform package, South Carolina included raising graduation requirements, requiring student proficiencies in basic skills for receipt of a diploma, and most of the other features of the California legislation. But in addition, South Carolina stipulated that special instruction in basic skills must be provided to every student who does not meet the state's standards (Ibid.:115-118).

The state has begun to set out intensive compensatory education programs for students in the bottom fourth on state reading and mathematics tests, and less intensive programs for students who score above the bottom fourth but who still fall below state norms. Special attention targets seventh graders because of the crucial role of the middle school in the overall process. The new law also requires that all five year olds attend kindergarten in order to catch up, if necessary, before reaching the primary grades ("Get-Tough Policies Lead to Compensatory Education Changes," 1984). South Carolina's approach is unique in its direct consideration of the educationally disadvantaged as a target of educational reform.

An official committee charged with drafting recommendations for educational reform in Texas has proposed a comprehensive program in which: "The State should require school districts to provide tutorial service, at the school, to a student failing a single unit of any subject at any time during the school year" (Select Committee on Public Education, State of Texas, 1984). But the state only began to consider implementing the reforms early in 1985.

Unfortunately, most other states have made little or no specific provision for the educationally disadvantaged, other than hoping that rising standards will lift the learning levels of all students.

Reforms as Obstacles to the Disadvantaged

Of course, if improvements in teacher salaries or professional training improve the overall quality of teaching, there will be some beneficial effect for all students. But such a slow process is not an effective substitute for reforms targeted to achieve specific educational goals for the educationally disadvantaged. Worse yet, in the absence of explicit efforts to improve education for the disadvantaged, some general reforms may actually create new obstacles to improving their situation (Toch, 1984). Most notably, the setting of competency standards for a diploma, raising course requirements for graduation, and increasing the amount of time spent in school may all have the effect of increasing dropout rates among the most dropout-prone populations (Glazer, 1984).

Setting state competency standards for receiving a diploma. On the surface, this is a very attractive reform, assuring that all holders of a diploma will have certain proficiencies. But if disadvantaged students enter secondary school with a two- or three-year handicap in achievement scores relative to their more advantaged counterparts, it is likely that few of them will suddenly catch up to meet competency standards at graduation. More likely, even if they try very hard, they will not meet the stringent standards and will not receive a diploma for their efforts. The additional standards may simply discourage them from trying and remaining in school.

There are two ways to solve this dilemma. If competencies are set at a very low level for graduation, such as at eighth grade achievement, they will be relatively easy to satisfy, even for most of the disadvantaged who do not drop out. In the past, most states have chosen low competency standards. An alternative is to choose higher standards and provide educational resources and programs for disadvantaged students so that they can meet the higher standards. Many of the new standards are likely to be higher than previous ones, and therefore will lead to remediation for the disadvantaged. But, without resources and a mandated commitment, this is unlikely to happen.

Philadelphia is a case in point in being faced with remedial needs that it has not been able to fund (Toch, 1984). The state has just reported the first round of results under its statewide TELL tests. Although 60 percent of Philadelphia's students failed to meet the norm, the state's financial assistance for remediation falls far short of what will be required. Unfortunately, the mere existence of test score data revealing the poor achievement of the disadvantaged does not necessarily set in motion resources and programs to address the condition. Explicit provisions for doing so must be a part of any increased standards.

In the absence of compensatory programs, the attempt to raise standards to meet educational and job-related requirements will increase pressure on the disadvantaged to drop out, even for those students who could have met the standards with appropriate educational assistance. And, failure to meet standards and obtain a competency-based diploma may increase employer rejection of such students, even when they are able to perform the job (Levin, 1978).

Without a major attack on the educational problems of the disadvantaged in the earliest grades, the raising of competency standards will discourage them from completing school. This is even true when standards are used for determining promotion in earlier grades. Without major funding and programs to alleviate early deficiencies, too many of the disadvantaged will be required to repeat grades, at great cost to the schools. Clearly, it would be more efficient to put those resources into remediation of achievement deficiencies at each grade level than using grade repetition as a device to meet standards.

Increases in course requirements for graduation. When disadvantaged students who enter ninth grade are performing at a sixth grade level, additional course requirements in mathematics, English and science are not likely to be effective in raising performance levels for them. The additional requirements will mean that benefiting from high school level instruction will be made even more difficult. Students who are far behind reasonable norms need to be brought up to those norms before they can benefit from existing high school requirements, to say nothing of additional requirements.

Increasing the length of the school day and/or school year. General evidence that more instructional time will improve learning outcomes is meager at best. But there is virtually no evidence that the present school day or school year is the limiting factor affecting the learning of disadvantaged students (Levin, 1984). For many of these students, the fact that they are doing poorly and see no hope of catching up reinforces the feeling of school as an oppressive environment. To require them to spend more time in such an environment without altering educational strategies to make their learning experience more successful is likely to produce greater disaffection. It is imperative that the learning situation become more vital and exciting, and that the student have some sense of progress rather than feelings of failure and futility. Without these changes, forcing the disadvantaged to spend more time in school is unlikely, in itself, to increase their achievement. To the contrary, it provides an additional pressure for dropping out.

Summary

Most educational reforms currently sponsored by states do not address specifically issues affecting educationally disadvantaged students. Reforms that create more time in school or higher standards -- without salient changes in the schooling process that will increase learning for the disadvantaged -- will likely increase dropout rates among those students who can scarcely hope to meet present standards. It is clear that whatever the merits of present reforms, they are incomplete and portend both a present and future disaster unless the needs of the disadvantaged are addressed.

IV. ADDRESSING THE NEEDS OF THE EDUCATIONALLY DISADVANTAGED

The unique needs of the educationally disadvantaged cannot be effectively addressed by reforms of a general nature such as increasing course requirements, raising teachers' salaries, or increasing the amount of instructional time. While these reforms may be desirable on their own merits, they should not be viewed as substitutes for direct and comprehensive strategies to solve the problems of the disadvantaged. And in the absence of specific remedial programs, general reforms may overwhelm the abilities of ever larger numbers of disadvantaged students to meet the requirements for high school completion.

A number of promising approaches address the educational deficiencies of disadvantaged populations. Many effective methods have been discovered in individual school districts and states. State coordinators of compensatory education represent an unusually rich repository of information on effective practices for particular types of disadvantaged students. One common characteristic is that they focus directly on the disadvantaged rather than assuming that general educational reforms will automatically meet the educational needs of all groups. While such general reforms as improving teacher selection, raising teachers' salaries, and increasing performance standards for students may be generally meritorious, they have little direct impact on the educational fortunes of the disadvantaged unless other changes are also made.

Approaches to change must be viewed in the context of an overall strategy for placing the challenge of the disadvantaged on the national policy agenda and addressing the challenge effectively. Such an agenda should include establishing goals, accountability, resources and responsibilities.

Goals

Goals for alleviating educational disadvantage must be concrete. Just as higher standards are set for the schools, so specific goals should be set for bringing educationally disadvantaged students up to the required norms. This should be done at the initial stages of schooling so that by the time students enter secondary school, they are able to benefit from regular instruction.

The establishment of goals has two purposes. First, it is a political statement that signals priority. Second, goals are a means for assessing progress. Therefore, specific achievement goals for educationally disadvantaged students should be set at both state and local levels in the form of measurable standards of achievement.

Accountability

A system of accountability requires both information and sanctions.

All jurisdictions should have information about their disadvantaged groups: the number of students, identifying characteristics, educational performance at school entry and progress at subsequent grade levels. Data should be provided publicly on how student achievement at each stage compares with the goals set for that level. Parents should be provided with a clear understanding of their children's status and progress.

Emphasis should be placed at the level of the individual school and school principal for meeting the goals that are set out. When schools or individual teachers consistently fail to make sufficient progress, sanctions are warranted. They could include replacement or termination of teachers and/or principals while conforming to standards of due process (Bridges, 1984). In cases where schools or school districts consistently fail to make adequate progress, the state may wish to bring in a "trouble-shooting" team to pinpoint problems and recommend appropriate action to educators, citizens and school boards.

Resources

Addressing the needs of educationally disadvantaged students cannot be done without adequate resources. Although some interventions will require little additional expenditure, such as the use of more appropriate curricula or more flexible school policies, others will need modest increases and yet others, major investments. For example, major achievement gains can be made for as little as $120 a year per subject for each student in mathematics and reading through computer-assisted instruction. Even larger gains are possible through good peer tutoring programs that cost somewhat over $200 a year per student (Levin and Meister, 1984). But other instructional remedies may require considerable increases in personnel or services. For example, the extensive use of remedial specialists in all subjects for small groups of students is likely to be expensive, as is the extensive use of computer-assisted instruction for all subjects. Experience will provide a better picture of costs as a serious effort is made to resolve the problems of educational disadvantage.

Many of the necessary resources can be made available by maximizing current resources through better coordination. For example, the states can make better use of existing funds, personnel, programs and knowledge now held and expended by individual state agencies that are unaware of similar efforts by other agencies at the state and local levels. At present, youth at risk of future unemployability remain unidentified and unserved even by existing programs (Public/Private Ventures, 1984).

In addition, federal funds now available for vocational education and summer youth employment programs can be more effectively utilized. National demonstration projects suggest successful methods to enhance existing programs (Manpower Demonstration Research Corporation, 1983; Public/Private Ventures, 1984).

Redeployment of education resources should also be considered. Funds now spent on dealing with problems that result from inadequacies of the educational system might be better spent on prevention. For example, the same funds now used to pay for students to repeat grades when they do not meet academic standards might be better spent in remediation programs that enable students to meet requirements for promotion. Likewise, funds spent for juvenile offenders might be better spent on education so that more youth forego juvenile crime. According to the California Youth Authority, it cost almost $28,000 a year to house a juvenile offender in a youth penal institution, some nine times the average expenditure per student in California's public schools. By improving educational opportunities for the disadvantaged, costs of other public services, such as public assistance and the criminal justice system, will decline.

Responsibilities

Pursuing this agenda will be the responsibility of all levels of government and many constituencies. The need for this broad diffusion of responsibility was well expressed in a speech by Governor Dick Riley to the Annual Convention of the South Carolina School Boards Association in 1984. Governor Riley emphasized that schools must respond to students who do not meet new standards mandated by new legislation in South Carolina:

> Higher standards are meant to enhance the value of public education, and to encourage and motivate students, not to punish them. When students do not meet the new standards, the spirit of the EIA (Education Improvement Act) demands that we respond with care and concern. A student who does not meet the standards should become the center of a school's focused attention, time, and assistance. [Students' courses] of study and placement should be critically reviewed to assure that [they are] getting what they need. Conferences with parents should be held, wherever and whenever necessary, to get the parents involved. Volunteers -- adults and able students -- should be mobilized to provide the students with intensive tutorial assistance. The School Improvement Councils should be alerted to keep track of the number of students in this category, what services are being provided to them, and what progress the students are making. Business and industries and other community-based resources should be called upon for help.

There are appropriate and necessary roles for each constituency in a true education reform process. These roles include the following:

For students: to be aware of the high priority they and society should place on their educational progress, and to take considerable responsibility for identifying problems on which they need assistance.

For parents: to stress the centrality of education in their children's lives, to assure that their children attend school regularly and do assignments, and to work with teachers and other school authorities to develop supportive learning environments.

For other community members: to hold their schools accountable by participating in school board elections and school councils, to make their concerns known to the responsible authorities and to provide voluntary services to their local schools.

For schools and state education agencies: to formulate strategies and programs for addressing the educational needs of the disadvantaged, strategies that include setting goals for narrowing the present gap in educational outcomes; finding particular approaches that are effective; obtaining the personnel and other resources to implement these approaches; and establishing a good system of evaluation that will provide information for teachers, parents, students and school administrators on the effectiveness of programs. Much of the responsibility must necessarily be placed at the individual school level for implementing the programs. Schools and their managers should be assessed according to how well they are succeeding at meeting learning goals for the disadvantaged.

For colleges and universities: to initiate research programs to develop effective strategies for educating the disadvantaged, to assist local schools to implement such strategies and carry out evaluations, and to train educational personnel who will be effective in meeting the goals of the programs. Professional educational organizations must take leadership in ensuring that the education of disadvantaged children is a high priority for their members.

For business and industry: to provide leadership in encouraging schools to provide a labor force of high quality, to monitor schools for the employability of their students and to provide political support for obtaining the funding and changes that are required to meet employment standards (National Academy of Sciences, 1984). In addition, businesses might provide both personnel and technical resources, such as computers, to assist local schools in addressing the educational needs of the disadvantaged, as well as providing parttime jobs for youth who might otherwise drop out of school.

For the states: to provide the leadership, technical assistance and financial support to launch these reforms and assure their successful implementation. This will mean that states will need to identify the populations that are at risk, their educational status and specific educational needs. It will mean establishing a system of accountability that will be able to monitor progress toward meeting educational goals for these populations. It will also mean providing the technical assistance to assure that the reforms are carried out efficiently and effectively and that additional funding requirements are satisfied. Clearly, the state departments of education will need to work closely with state legislatures in undertaking this leadership.

For the federal government: to consider an expanded role, considerably beyond present educational commitments, in addressing the problems of the educationally disadvantaged. Ignoring the problem will surely have important implications for the future economic position of the nation, the preparedness of its armed forces, racial and socioeconomic inequality and consequent political strife, expenditures on welfare and crime, and tax revenues.

Investing in the Education of the Disadvantaged

Above all, the effort should be viewed as a highly productive investment in the future of our society and economy. This was demonstrated in a study, prepared in 1972 for the Select Committee on Equal Educational Opportunity of the U.S. Senate, which attempted to ascertain the benefits and costs of assuring adequate education for all citizens (Levin, 1972). At that time, the minimum education required for meeting civic, economic and personal responsibilities was considered to be high school completion.

It was found that, if all males 25-34 had completed high school in 1969, they would have received an additional $237 billion in income over their lifetimes; the federal and state governments would have acquired an additional $71 billion in tax revenues. In contrast, the additional cost of providing this level of education was estimated to be about $40 billion. Each dollar of public investment in alleviating inadequate education was therefore estimated to yield about $6 in additional income to the affected population and almost $2 to the government treasury. In addition, it was estimated that society would have saved about $6 billion in the areas of public assistance and crime if all members of the population had received an adequate education. If the same relations hold today, the figures would be considerably higher, both because of inflation and a larger group of high school dropouts. Even these benefits do not include the returns to society from avoiding social disruption, political turmoil, the anguish of wasted lives and the social losses from undeveloped talent.

The large social return on investing in educational reforms for the disadvantaged was confirmed more recently in a study of the benefits and costs of preschool interventions for such children (Berrueta-Clement et al, 1984). Although the sample size was small, the results of the research were significant and impressive. The study found that, at age 19, youth from disadvantaged families who had gone to the Perry Preschool in Ypsilanti, Michigan, were less involved in anti-social behavior, less likely to be arrested, and less likely to serve juvenile sentences. In addition, they were less likely to repeat grades or to require remedial education at subsequent grade levels, more likely to continue in post-secondary and graduate education, and had greater early career success. For a single year of preschool, it was found that the present value of benefits exceeded costs by almost $29,000 a student, and that there were $7 in benefits for each $1 of cost. There are few business investments that have this large a return.

As with all social investments, time is of the essence. Schooling requires a considerable gestation period before its payoffs are evident. We must move with a great sense of urgency if we are to avert the costly consequences of our past inaction.

BIBLIOGRAPHY

Adler, Mortimer, The Paideia Proposal: An Educational Manifesto (New York: MacMillan Publishing Co. Inc., 1982).

Berman, Paul, and McLaughlin, Milbrey, Federal Programs Supporting Educational Change, Vol. IV: The Findings in Review, R-1589/4-HEW (Santa Monica, CA: The Rand Corporation, April 1975).

Boyer, Ernest L., High School: A Report on Secondary Education in America (New York: Harper and Row, 1983).

Bridge, G., Judd, C., and Moock, P., The Determinants of Educational Outcomes (Cambridge, Mass.: Ballinger Publishing Co., 1979).

Burton, Nancy W., and Jones, Lyle V., "Recent Trends in Achievement Levels of Black and White Youth," Educational Researcher, Vol. 11, No. 4 (April 1982), pp. 10-14.

Carnoy, Martin, and Levin, Henry M., Schooling and Work in the Democratic State (Stanford, CA: Stanford University Press, 1985).

Coleman, James S. et al., Equality of Educational Opportunity, U.S. Office of Education (Washington, D.C.: U.S. Government Printing Office, 1966).

Cross, K. Patricia, "The Rising Tide of School Reform Reports," Phi Delta Kappan, Vol. 66, No. 3 (November 1984), pp. 167-173.

Cuban, Larry, "School Reform by Remote Control: SB 813 in California," Phi Delta Kappan, Vol. 66, No. 3 (November 1984), pp. 213-215.

Glazer, Nathan, "The Problem with Competence," American Journal of Education, Vol. 92, No. 3 (1984), pp. 306-313.

Goodlad, John I., A Place Called School: Prospects for the Future (New York: McGraw Hill Book Co., 1983).

Griesemer, J. Lynn, and Butler, Cornelius, Education Under Study, 2nd edition (Chelmsford, MA: Northeast Regional Exchange Inc., November 1983).

Koretz, Daniel, and Ventresca, Marc, Poverty Among Children (Washington, D.C.: Congressional Budget Office, 1984).

Levin, Henry M., "About Time for Educational Reform," Educational Evaluation and Policy Analysis, Vol. 6, No. 2 (Summer 1984), pp. 151-163.

Levin, Henry M., "Educational Performance Standards: Image or Substance?" Journal of Educational Measurement, Vol. 15, No. 4 (Winter 1978), pp. 309-319.

Levin, Henry M., "The Costs to the Nation of Inadequate Education," A Report prepared for the Select Senate Committee on Equal Educational Opportunity (Washington, D.C.: U.S. Government Printing Office, 1972).

Levin, Henry M. (ed.), Community Control of Schools (Washington D.C.: The Brookings Institution, 1970).

Levin, Henry M., Glass, Gene V., and Meister, Gail R., "Cost-Effectiveness of Four Educational Interventions," Institute for Research on Educational Finance and Governance Project Report No. 84-A11 (Stanford, CA: Stanford University, May 1984).

Levin, Henry M., and Meister, Gail R., "Computers in the Balance: Weighing Costs and Effectiveness," Institute for Research on Educational Finance and Governance Policy Perspective, IFG Policy Notes, Vol. 5, No. 3 (Summer 1984).

Levin, Henry M., and Rumberger, Russell W., "The Low-Skill Future of High Tech," Technology Review, Vol. 86, No. 6 (August-September 1983), pp. 18-21.

Manpower Demonstration Research Corporation, Findings on Youth Employment: Lessons from MRDC Experience (New York, 1983).

Massachusetts Advocacy Center, Our Children At Risk: The Crisis in Public Education (Boston, 1984).

McNett, Ian, Demographic Imperatives for Education Policy (Washington, D.C.: American Council on Education, 1983).

Monthly Labor Review, Vol. 107, No. 11 (November 1984).

National Academy of Sciences, High Schools and the Changing Workplace, Report of the Panel on Secondary School Education for the Changing Workplace (Washington, D.C.: National Academy Press, 1984).

National Assessment of Educational Progress, Functional Literacy and Basic Reading Performance (Washington, D.C.: U.S. Office of Education, Department of Health, Education and Welfare, 1976).

National Center for Education Statistics, U.S. Department of Education, The Condition of Education, 1984 Edition (Washington, D.C.: U.S. Government Printing Office, 1984).

National Commission on Excellence in Education, A Nation at Risk: The Imperative for Educational Reform (Washington, D.C.: U.S. Department of Education, 1983).

National Commission on Secondary Education for Hispanics, "Make Something Happen:" Hispanics and Urban High School Reform, 2 Volumes (New York: Hispanic Policy Development Project, 1984).

National Science Board Commission on Precollege Education in Mathematics, Science, and Technology, Educating Americans for the 21st Century (Washington, D.C.: National Science Foundation, 1983).

New York Times, "Test Scores for Blacks Are Rising," (January 12, 1985), p.5.

Public/Private Ventures, A Practitioner's Guide: Strategies, Programs, and Resources for Youth Employability Development (Philadelphia, 1984).

"Get-Tough Policies Lead to Compensatory Education Changes," Report on Education of the Disadvantaged (August 17, 1984), pp. 5-6.

Riley, Dick (Governor), Speech to Annual Convention of South Carolina School Boards Association (October 27, 1984), excerpts in mimeo.

Rumberger, Russell W., "Dropping Out of High School: The Influence of Race, Sex, and Family Background," American Educational Research Journal, Vol. 20, No. 2 (Summer 1983), pp. 199-220.

Select Committee on Public Education, State of Texas, Recommendations (Austin: Select Committee on Public Education, 1984).

Sizer, Theodore R., Horace's Compromise: The Dilemma of the American High School, (Boston: Houghton Mifflin, 1984).

Task Force on Education for Economic Growth, Action for Excellence (Denver: Education Commission of the States, 1983).

Toch, Thomas, "The Dark Side of the Excellence Movement," Phi Delta Kappan, Vol. 66, No. 3 (November 1984), pp 173-176.

U.S. Department of Commerce, Bureau of the Census, Lifetime Earnings Estimates for Men and Women in the United States, Current Population Reports, Series p. 60, No. 139 (Washington, D.C.: U.S. Government Printing Office, 1983a).

U.S. Department of Commerce, Bureau of the Census, Money Income of Households, Families, and Persons in the United States: 1981, Current Population Reports, Series p. 60, No. 137 (Washington, D.C.: U.S. Government Printing Office, 1983b).

U.S. Department of Education, The Nation Responds (Washington, D.C.: U.S. Government Printing Office, 1984).

Waggoner, Dorothy, "Minority Language Population from the 1980 Census," National Clearinghouse for Bilingual Education Forum, Vol. VII, No. 5 (October/November 1984), pp. 2, 6-7.